### **SECTION 09 6500**

## **RESILIENT FLOORING**

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### LANL MASTER SPECIFICATION

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the ESM Architectural POC.

When assembling a specification package, include applicable specifications from all Divisions, especially Division 1, General Requirements.

Delete information within "stars" during editing.

Specification developed for ML-3 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

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### PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Furnishing and installation of [sheet vinyl] [vinyl composition tile] flooring.
- B. Furnishing and installation of rubber stair treads nosings, risers, and landings.]

#### 1.2 REFERENCES

- A. ASTM D-2047, Static Coefficient of Friction.
- B. ASTM E-84, Test Method for Surface Burning Characteristics of Building Materials.
- C. ASTM E-648, Standard Method of Test for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
- D. ASTM F-2169, Standard Specification for Resilient Stair Treads.
- E. EPA (Environmental Protection Agency) CPG (Comprehensive Procurement Guideline), http://www.epa.gov/cpg.

#### 1.3 SUBMITTALS

- A. Submit the following in accordance with Section 01 3300, Submittal Procedures:
  - 1. Product data for [approval] [information] of the resilient sheet flooring. Provide samples of the pattern style and color range specified or offered by the manufacturer.
  - 2. Samples for [approval] [information] of the resilient tile flooring. Provide

samples of the pattern style and color range specified or offered by the manufacturer.

- Manufacturer's installation instructions.
- 4. Cleaning and maintenance information.
- 5. Certification that percentage of recovered materials will be at least equal to amount specified in Part 2 for applicable material.
- 6. Manufacturer's certification of asbestos-free products for all products including adhesives and mastics.

## 1.4 REGULATORY REQUIREMENTS

A. Materials and accessories: Flame spread/smoke developed rating of 25/50 or less in accordance with ASTM E84.

# 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials for 3 days prior to installation in area of installation to achieve temperature stability. Allow 7 days for storage in winter months. Store materials in manufacturer's shipping packages.
- B. Maintain ambient temperature required by adhesive manufacturer 3 days prior to, during, and 24 hours after installation of materials.
- C. Store highly flammable materials (adhesives, fillers, solvents) segregated from other materials and arranged to facilitate fire fighting.

## 1.6 EXTRA MATERIALS

A. Provide at least 5 percent of calculated area of flooring materials of each type specified.

### PART 2 PRODUCTS

### 2.1 PRODUCT OPTIONS AND SUBSTITUTIONS

A. Comply with Sections 01 2500, Substitution Procedures.

## 2.2 RESILIENT FLOORING AND ACCESSORIES

- A. Sheet Vinyl with Backing: ASTM F-1303, Type II, vinyl wear thickness of 0.050 inch, total thickness of 0.080 inch; sheet width of 6 feet.
- B. Vinyl Composition Tile: ASTM E-84, 1/8 inch thick x 12 inches x 12 inches, flame spread of not more than 75 and a critical radiant flux of not less than 0.45 w/cm2 according to ASTM E-648.

- C. Stair Coverings: ASTM D-2047, E-84, E-648, and F-2169, flame spread rating of 25 or less; cured rubber compound; sanded back; standard factory homogenous solid color throughout; and raised circular design; minimum recovered (recycled) material content 90-100 percent of postconsumer materials in accordance to EPA's CPG.
  - 1. Stair Treads: 1/4 inch thick at nose tapering back to rear edge, full width and depth of stair tread in one piece; return down edge of tread 1 1/2 inches to form nosing.
  - 2. Stair Risers: Sheet material to match stair treads, 1/8 inch thick.
  - 3. Stair Landing: Tile or sheet material to match stair treads, 1/8 inch thick.
  - 4. Base: Material to match stair treads, 1/8 inch thick.
- D. Fillers and Leveling Compounds: As recommended by the flooring material manufacturer for filling small cracks, holes, and depressions in the substrate.
- E. Primers and Adhesives: Use non-staining and waterproof types as recommended by the flooring material manufacturer. Asphalt emulsions and other non-waterproof types will not be acceptable.
- F. Edge Strips: Use flooring material.
- G. Sealer and Wax: Use products recommended by flooring material manufacturer.

## 2.3 MANUFACTURERS

- A. Sheet Vinyl with Backing
  - 1. Armstrong World Industries, Inc., "Safeguard Design" pattern.
  - 2. Congoleum Corp., "Specifications" pattern.
  - 3. Mannington, "Lifelines" pattern.
- B. Vinyl Composition Tile
  - 1. Armstrong World Industries, Inc., "Imperial Modern" pattern.
  - 2. Azrock Industries Inc., "Custom Cortina" pattern.
  - 3. Congoleum Corp., "Alternatives" pattern.
- C. Stair Covering Materials
  - 1. Burke Flooring Products, "Rouleau"
  - 2. Johnsonite, "Roundel"

3. R.C. Musson Rubber Co., "No. 800"

### PART 3 EXECUTION

### 3.1 INSPECTION

- A. Verify that surfaces are smooth and flat with maximum variation of 1/8 inch in 10 feet, and are ready to receive work.
- B. Verify that concrete floors are dry to a maximum moisture content of 3 percent, and exhibit negative alkalinity, carbonization or dusting.
- C. Verify that floor surfaces are free of substances that may impair adhesion of adhesive and finish materials.
- D. Do not begin installation, and notify LANL Construction Inspector, if existing conditions will adversely affect acceptable results.

## 3.2 PREPARATION

- A. Thoroughly clean all surfaces to receive covering. Where replacement of existing floor tile is specified on the drawings, remove all traces of floor tile adhesive. The floor surface temperature shall be 60 degrees F or higher.
- B. Concrete surfaces should be at least 30 days old and cleaned of all traces of curing compound. Smooth all roughness and uneven joints by fillers and/or grinding.
- C. Sand wood floors smooth and make even all joints by fillers or sanding. Where specified on the drawings, install an underlayment of A-C exterior fir plywood, thickness as specified. Install plywood finish side up. Secure with barbed or serrated nails, using one fastener for every 2 square feet.

## 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions, with a minimum number of seams in sheet vinyl.
- B. Spread only enough adhesive to permit installation of materials before initial set.
- C. Set flooring in place and press with heavy roller to attain full adhesion.
- D. Terminate flooring at centerline of door where adjacent floor finish is dissimilar.
- E. Install tile with pattern running in same direction no checker boarding.
- F. Scribe flooring to walls, columns, cabinets, floor outlets and other appurtenances to provide tight joints.

# 3.4 CLEANING

- A. Keep surfaces of resilient covering free of adhesive while installing. Remove excess adhesive from surface within recommended working time.
- B. Remove soil, stain, and extraneous material caused by installation of resilient material from adjacent surfaces.
- C. Clean and finish resilient covering surfaces as recommended by the manufacturer. Remove and replace defective, off color, or improperly installed materials that cannot be made to satisfactorily match adjacent surfaces.

## 3.5 PROTECTION

A. Protect the installed resilient material from damage. Do not permit traffic or work over the installed material until the material is adequately protected.

|                                       | END OF SECTION |
|---------------------------------------|----------------|
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| *********                             | ******         |
| Do not delete the following reference | information:   |
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## FOR LANL USE ONLY

END OF CECTION

This project specification is based on LANL Master Specification 09 6500 Rev. 0, dated January 6, 2006.